Collider-Accelerator Department

FY 2006 Self-Assessment Program

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Approved by:		
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D. Lowenstein, Department Chairman

I. Collider-Accelerator (C-A) Department Mission

In support of Brookhaven National Laboratory's broad mission of providing excellent science and advanced technology in a safe, environmentally responsible manner the Collider Accelerator Department is committed to the following:

- Excellence in environmental responsibility and safety in all C-A Department operations.
- Develop, improve, and operate the suite of proton/heavy ion accelerators used to carry out the program of accelerator-based experiments at BNL.
- Support the experimental program including design, construction, and operation of the beam transports to the experiments and partial support of detector and research needs of the experiments.
- Design and construct new accelerator facilities in support of the BNL and National Missions.

II. Self-Assessment Program

The objective of the C-A self-assessment program is to provide a systematic approach to performance management. That is, to provide C-A management with information needed to ensure organizational performance objectives are being met and appropriate improvement actions are identified and implemented.

Supporting information for the objectives of Critical Outcome 1.0, Basic Science & Technology, are reported in the BNL Integrated Information Management System. This system provides the data required for the preparation of BNL Appendix B Self Evaluation Reports.

C-A Self-Assessment supporting documentation; e.g., Program and Facility, Organization, ESHQ Division, Assessment and Inspection Programs, C-A Environmental Management Program, Organization, Operations and Procedures Manual, Conduct of Operations Agreement, Training Programs and Associated Records and Tier 1 Safety Inspections, are maintained on the Collider-Accelerator web site.

The C-A Department has adopted a self-assessment framework primarily based on the Malcolm Baldrige National Quality Award Criteria, which are as follows:

- Leadership Commitment and Involvement
- Human Resource Development and Management
- Customer Focus and Satisfaction (Customer Value)
- Process Management
- Business and Operational Results
- Compliance with Laws Regulations and Contractual Requirements

III. Evaluation of Objectives and Measures

For each of the assessment criteria stated above, C-AD has established appropriate objectives and performance measures. Improvement actions that were documented in the C-A Record of Decision from Senior Management Evaluation (September 14, 2005) have been incorporated into C-A OPM 14.1, Environmental Management Plan for C-AD and SMD Operations and C-A OPM 14.30, OSH Management Plan for C-AD and SMD Accelerators, Experimental Areas, Shops and Offices, as appropriate. C-A family ATS will be used to track all measures and improvement action to closure.

In addition to those items outlined in the attached matrix, the following is a list of open items from the C-A FY 2005 Self-Assessment Program and C-A 2004 Environmental Management Review Record of Decision that will be addressed in FY 2006.

2742.1.12 - Electrical Ad Hoc Committee action items

Description: Implement corrective actions in the report of the Electrical Ad Hoc Committee (3017.1.10)

2742.2.2 - Training of Building Managers

Description: Increase the number of Building Managers trained in OSHA regulations (3017.1.11)

2742.2.3 - Assess OPM 9.4.2 (FY 04 SA)

Description: Assess implementation of C-A OPM 9.4.2, C-A Self-Evaluation, original due date was in CY 04; assessment was re-scheduled due to change in system owner. (3017.1.12)

<u>2742.3.1</u> - g-2 environmental updates

Description: Provide environmental updates to CAC & BER on g-2 submission of a Focused Feasibility Study. Actual due date is 6/06. (3017.1.13)

2742.6.1 - Installation of cap at Linac (FY 04 ROD)

Description: Place water-impermeable membranes over activated soil areas at the Linac. All caps with the exception of two minor suspect areas are in place. (3017.1.14)

<u>2742.6.2</u> & <u>2421.1.1</u>- FY 04 clean-up strategy (FY 04 ROD)

Description: Clean up the steel and other debris on Railroad Avenue, concentrate on cleaning up "Inner Mongolia," and begin to remove/replace PCB capacitors at Linac. (3017.1.15)

2742.6.3 - Fire protection upgrade installation (FY 04 ROD)

Description: There should be renewed emphasis on fire protection since it impacts safety and routine operations. For example, the aging fire-alarm system is a major concern. Because some fire protection upgrades have started but are proceeding slowly, the Department should encourage Plant Engineering to use an outside supplier to install the new fie alarm system components.

(3017.1.16)

<u>2742.6.5</u> - Add ozone water treat system (FY 04 SA)

Description: Pursue High Return on Investment (ROI) P2 funding from DOE for installation of additional ozone water treatment system for RHIC STAR cooling tower. This action item was initiated in the C-A FY 2004 Self-Assessment. As of 2/11/05, no funding was available in 2005. Decision made to follow-up in FY 2006. (3017.1.17)

2742.6.6 & 2421.1.3 - Upgrades to C-A water system (ADS# 0007) (FY 04 SA) (3017.1.4)

Description: Perform planned upgrades to C-A water systems in accordance with ADS # 0007 and track progress. This is an ongoing program that started in 2001. There are many subtasks or efforts that pertain. This program is incrementally funded and will continue for at least 3 more years with any additions.

(3017.1.18)

<u>2742.6.7</u> - g-2 plume (FY 04 SA)

Description: Work with ERD to review and determine best method to deal with g-2 tritiated plume. A Focused Feasibility Study will be written by 2006. Long term monitoring and natural attenuation of the plume are to be expected (3017.1.19)

2742.6.21 - Inventory of ozone depleting substances

Description: Conduct an inventory of Ozone Depleting Substances and forward that inventory to the CAA SME (3017.1.20)

2742.6.25 - Eliminate NSRL photographic waste

Description: Eliminate NSRL photographic waste through the implementation and use of the NSRL digital imaging system.
(3017.1.21)

2421.1.4 - Mapping of activated soil areas

Description: Complete the archival mapping of activated soil areas. (3017.1.22)

2421.1.6 - Building 912 roof

Description: Continue to promote the repair of the Building 912 roof. (3017.1.23)

2421.1.16 - Repetitive OSHA violations

Description: The Tier 1 inspection program has found and reported numerous repetitive OSHA violations (easy stuff, such as blocked electrical panels). The C-AD ESHQ Division should work with the WOSH Committee to suggest ways to implement a system to prevent repetitive violations. (3017.1.24)

ASSESSMENT CRITERIA 1: Leadership Commitment and Involvement

OBJECTIVE:

Excellence in environmental responsibility and safety in all Department operations.

- 1.1. Maintain laboratory-wide ISO 14001 and 18001 registrations and continually improve the EMS and OSH programs.
- 1.2. Improve Material Handling Programs
- 1.3. Streamline OSH and E Management Systems
- 1.4. Reduce Injury Rates to Meet DOE Expectations
- 1.5. Compliance With Requirements and Standards
- 1.6. Renew Emphasis on Fire Protection Upgrades

Measures	Responsibility	Schedule/Due Date
Senior Management Evaluation convened and "Record of Decision" issued. (3017.1.1)	Associate Chair for ESHQ	September 2006
OSH/EMS team task list completed (3017.1.2)	Associate Chair for ESHQ	September 2006

Reference section 10, Structure, Authorities, Responsibilities in attachment 1, <u>C-A OPM 14.1, Environmental Management Plan for C-AD and SMD Operations</u>, for the complete list of tasks/measures, responsible person(s) and scheduled completion dates.

Reference section 10, Structure, Authorities, Responsibilities in attachment 2, <u>C-A OPM 14.30,OSH Management Plan for C-AD and SMD Accelerators, Experimental Areas, Shops and Offices</u>, for the complete list of tasks/measures, responsible person(s) and scheduled completion dates.

All tasks will be tracked to closure in the C-A Family Assessment Tracking System. (3017.2 and 3017.3)

ASSESSMENT CRITERIA 2: Human Resource Development and Management

OBJECTIVE:

Create a pool of talented, empowered, motivated, and goal oriented leaders/managers/workers to support and enhance the C-A competitive position within the DOE laboratory complex.

Measures	Responsibility	Schedule/Due Date
Maintain staff training > 95% complete (3017.1.3)	C-A & SMD Training Managers	September 2006
Increase employee awareness of safety through participation in multiple (~4) safety awareness activities; e.g. show the film remember Charlie (3017.1.4)	ESHQ Division Head	September 2006

ASSESSMENT CRITERIA 3: Customer Focus and Satisfaction (Customer Value)

OBJECTIVE: Operate the C-A facility in a manner that is responsive to C-A internal and external customer expectations.

Maggurag	Responsibility	Schedule/Due
Measures	Responsibility	Date

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ASSESSMENT CRITERIA 4: Process Management

OBJECTIVE:

Establish, maintain and improve C-A processes/procedures for implementing Laboratory and organizational expectations.

Measures	Responsibility	Schedule/Due Date
Perform assessment on the C-A implementation of the BNL Management System - Emergency Preparedness (3017.1.5) • Shelter-in-Place • Emergency Pre-Plan Response Cards	Q Group	September 2006
Perform assessment on the C-A implementation of the BNL Management System - Environmental Management (3017.1.6) Regulatory Compliance EMS Assessments Management Review	Q Group	Annual 3 rd quarter
Perform assessment on the C-A implementation of the BNL Management System - Records Management (3017.1.7) • Status of Records Inventory, Transferring Responsibility for Records	Q Group	September 2006
Perform assessment on the C-A implementation of the BNL Management System - Worker Safety and Health (3017.1.8) • Lockout/Tagout	Q Group	September 2006

ASSESSMENT CRITERIA 5: Business and Operational Results

OBJECTIVE:

- 1 Design and construct new accelerator facilities in support of the BNL and national missions.
- 2 Operational
 - a) Operate and improve the suite of proton/heavy ion accelerators and beam transports used to carry out the program of accelerator-based experiments at BNL thus supporting the research mission of the laboratory's user population.
 - b) Support the experimental program including design, construction, and operation of the beam transports to the experiments plus partial support of detector and research needs of the experiments.

Measures	Responsibility	Schedule/Due Date
C-A Operations per <u>FY06 Schedule</u> and the accelerator performance meets the operational goals as specified in the most recent Field Work Proposal. (3017.1.9)	Associate Chair, Accelerators	September 2006

ASSESSMENT CRITERIA 6: Compliance with Laws Regulations and Contractual Requirements

OBJECTIVE:

- 1. Compliance Achieve full compliance with applicable environmental requirements.
 - a. Consistently meet all SPDES permit limits and comply with the Liquid Effluents subject area.
 - b. Article 12 Conformance.
 - c. Improve Resource Conservation and Recovery Act (RCRA) and Radiological Waste Compliance
 - d. Meet Federal and State Air Program Requirements including reducing the use of (and eventual phase out of) Ozone Depleting Substances (ODS)
 - e. Schedule and conduct regulatory compliance assessments to evaluate compliance to applicable regulations on a three-year cycle
 - f. Participate in EPA Performance Track Program
- 2. Pollution Prevention Integrate pollution prevention (P2) into work planning processes (facility design, experimental review, process assessment, work planning, etc.) and expand participation in the P2 program.
 - a. Reduce generation of hazardous, mixed, and low-level radioactive routine waste streams
 - b. Expand awareness and involvement in the BNL P2 Program. Evaluate and implement pollution prevention opportunities.
 - c. Reduce or prevent generation of non-routine waste, including spills
- 3. Communications Improve communications, trust, and relationship with stakeholders on environmental programs.
- 4. Groundwater Protection Fully implement groundwater protection program. Protect groundwater quality from further chemical and radiological releases, and remediate existing contaminated groundwater.

Measures Responsibility	Schedule/Due Date
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All tasks will be tracked to closure in the C-A Family Assessment Tracking System. (3017.2 and 3017.3)

Reference Documents

C-A OPM 14.1, Environmental Management Plan for C-AD and SMD Operations,

C-A OPM 14.30, OSH Management Plan for C-AD and SMD Accelerators, Experimental Areas, Shops and Offices